Step 3: Making of the laser weld points 4 with thermal distance C to outer link plate.

The link-plate chain without link-plate frame produced with the characteristics of the invention only consists of two components, the link plates and the rocker joints, and is particularly cost-effective and best fitted for large-scale production. This considerably favors the use of the continuously variable conical disc transmission (CVT) as a motor vehicle transmission, thereby reducing fuel consumption and polluant emission. Thereby the invention is a non-negligible contribution to environmental protection.

What We Claim :

1. Link-plate chain for a continuously variable conical disk transmission only consisting of link plates with different pitches and rocker joints, the rocker joint face transmitting the friction forces between conical friction disks and link-plate chain, characterized by
   first : mechanical stops (3) being made on the rocker joint elements (1,2),
   second : the rocker joint elements (1,2) being alternately inserted into the link plate openings from the left and from the right, and
   third : the rocker joints (1,2) having a safety stop (4) at the other side, preventing lateral motion.

2. Link-plate chain according to claim 1, characterized by the rocker joint elements (1,2) of the same link, carrying stops (3) on one side, being individually inserted from the left and from the right into the link plate openings (fig. 1).

3. Link-plate chain according to claim 1, characterized by the rocker joint elements (1,2) of the same link, carrying stops (3) on one side, being inserted by pairs from the left and from the right into the link plate openings (fig. 2).

4. Link-plate chain according to claims 1 to 3, characterized by the mechanical stops (3) being made on the top, or on top and bottom.

5. Link-plate chain according to claims 1 to 4, characterized by the mechanical stops (3) consisting of a high-energy (laser) weld point.

6. Link-plate chain according to claims 1 to 4, characterized by the mechanical stops (3) being made by material displacement (swaging).

7. Link-plate chain according to claims 1 to 6, characterized by the retaining stop (4) of the rocker joint elements (1,2) against lateral movement from the link plate openings consisting of a high-energy (laser) weld point with a thermal distance C from the outer link plate (5).

8. Link-plate chain according to claims 1 to 6, characterized by the retaining stop (4) of the rocker joint elements (1,2) against lateral movement from the link plate openings being obtained by material displacement.